

# Maryland Department of Health and Mental Hygiene

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#### Office of Preparedness & Response

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# **September 7, 2007**

# Public Health & Emergency Preparedness Bulletin: # 2007:35 Reporting for the week ending 09/01/07 (MMWR Week #35)

#### **CURRENT HOMELAND SECURITY THREAT LEVELS**

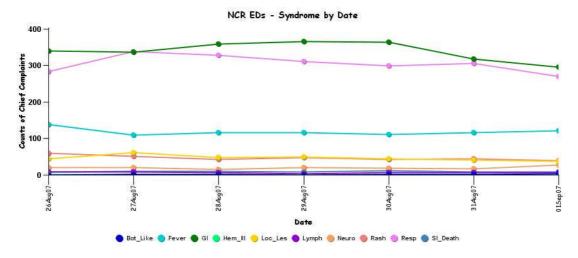
National: Yellow (ELEVATED) \*The threat level in the airline sector is Orange (HIGH)

Maryland: Yellow (ELEVATED)

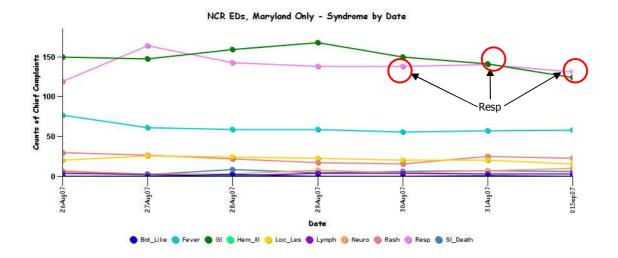
#### SYNDROMIC SURVEILLANCE REPORTS

# **ESSENCE** (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts only. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

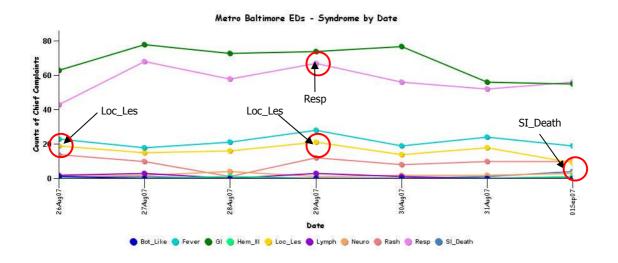
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



<sup>\*</sup> Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system



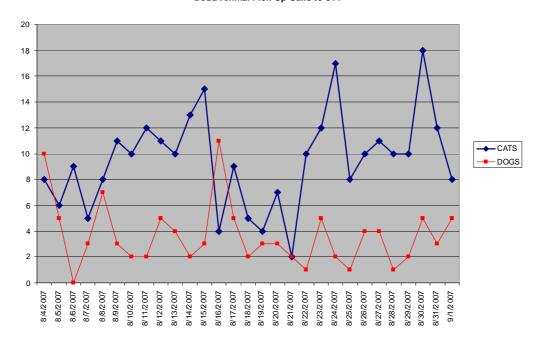
st Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system



<sup>\*</sup> Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

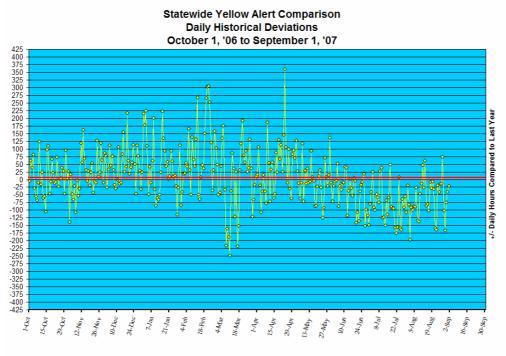
**BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT:** No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

Dead Animal Pick-Up Calls to 311



# REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/06.



#### **REVIEW OF MORTALITY REPORTS**

**OCME:** OCME reports no suspicious deaths related to BT for the week.

#### MARYLAND TOXIDROMIC SURVEILLANCE

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in August 2007 did not identify any cases of possible terrorism events.

#### **REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS**

#### COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases:	26	0
Prior week:	31	0
Week#35, 2006:	19	1

#### OUTBREAKS: 3 outbreaks were reported to DHMH during MMWR Week 35 (Aug 26-Sept 1, 2007):

#### 1 Respiratory illness outbreak

1 outbreak of PNEUMONIA/AFRD associated with a Nursing Home

#### 2 Rash illness outbreaks

1 outbreak of SCABIES associated with a Nursing Home

1 outbreak of MRSA associated with a School

### MARYLAND SEASONAL FLU STATUS:

Seasonal Influenza reporting occurs October through May. No cases of influenza were reported to DHMH during MMWR Week 35 (August 26 – September 1, 2007).

\*Please note: Influenza data reported to DHMH through the National Electronic Disease Surveillance System (NEDSS) is provisional and subject to further review.

## PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

**WHO Pandemic Influenza Phase:** Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

**US Pandemic Influenza Stage:** Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

\*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

**WHO update:** As of August 31, 2007, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 327, of which 199 have been fatal. Thus, the case fatality rate for human H5N1 is about 61%.

**AVIAN INFLUENZA, DOMESTIC GOOSE (Germany):** 26 Aug 2007, German health officials slaughtered 160 000 geese over the weekend after the deadly H5N1 bird-flu virus was found in a poultry farm near the southern city of Erlangen. The cull was ordered after 400 geese were found dead. A team of 8 vets and poultry workers at the farm in Wachenroth, Bavaria, started what officials called the biggest ever culling operation in Germany late on Aug 25. The birds were placed in 3 large containers where they were either gassed or electrocuted, officials said. Tests by the Friedrich Loeffler Institute of Veterinary Medicine had found the lethal strain of the virus in 5 of the birds. A 3-km exclusion zone

was set up around the farm near the city of Erlangen, which is about 120 miles north of Munich, as officials began tracking down the cause of the infection. Initial reports said the infected animals came from another poultry farm in the northern state of Lower Saxony, but this was later denied. "We have not been able to pinpoint the source of outbreak," said Bavarian Health Secretary Otmar Bernhard. Experts are expected to keep trying to determine how the virus entered the farm. There have been no human deaths from bird flu in Europe, where outbreaks in animals were reported recently in several countries, including Germany and the Czech Republic. Bird flu hit wild birds and some domestic poultry in other parts of Germany this year.

#### **NATIONAL DISEASE REPORTS:**

**ANTHRAX, BOVINE (Montana):** 28 Aug 2007, Laboratory results confirmed anthrax as the cause of death of 8 cows last week in a single herd near Raymond, MT, according to the Montana Department of Livestock. Local and state animal health officials have visited the location and have taken appropriate measures to prevent further spread of the disease. Field investigations indicate this was a naturally occurring case of anthrax and has been limited to one ranch. Neighboring ranches have been notified. The last reported case of naturally occurring anthrax in livestock in Montana was reported in 2005 in Roosevelt County. Acting state veterinarian Dr. Jeanne Rankin said anthrax spores are known to exist in soils in certain regions of Montana, and that isolated cases of anthrax can be expected to occasionally occur in the state. Outbreaks have occurred in both North Dakota and South Dakota this season, indicating climatic conditions are favorable for such a naturally occurring outbreak. Rankin urges livestock owners to contact their herd veterinarian immediately to investigate incidents of sudden, unexplained deaths in their herd. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

**SALMONELLOSIS SCHWARZENGRUND, PET OWNERS (Multi State):** 28 Aug 2007, The CDC is collaborating with public health officials in Pennsylvania and other state health departments and the US FDA to investigate a multi-state outbreak of Salmonella serotype Schwarzengrund infections in humans. These human illnesses have been linked with dry pet food produced by Mars Petcare US at a single manufacturing facility in Pennsylvania. People who think they might have become ill after contact with dry pet food or with an animal that has eaten dry pet food should consult their health-care providers. As of Aug 28, 66 persons infected with the same strain of Salmonella Schwarzengrund have been reported to CDC from 18 states. Of the ill persons for whom an age is available, 39 percent were one year of age or younger. Of ill persons for whom clinical information is available, 32 percent developed bloody diarrhea and 25 percent were hospitalized. No deaths have been reported. State and local health departments and CDC continue to receive reports of cases, suggesting the outbreak is ongoing. On Aug 21, Mars Petcare US announced a voluntary recall of select bags of these 2 brands: Red Flannel Large Breed Adult Formula dry dog food and Krasdale Gravy dry dog food. Neither of these brands has been linked to human illness. Investigations are ongoing to determine why human illness, especially among infants, is associated with dry pet food. Factors under investigation include handling and storage of dry pet food, hand-washing practices, exposure of children to dry pet food, and location in the home where pets are fed. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

**E. COLI 0157, GROUND BEEF , ALERT (Washington, Oregon):** 30 Aug 2007, The U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS) is issuing a public health alert for approximately 41 305 pounds of ground beef products that may be contaminated with E. coli 0157: H7 that were produced at Interstate Meat Dist. Inc., a Clackamas, Oregon establishment. Each package also bears the establishment number "Est. 965" inside the USDA mark of inspection as well as a sell-by date between "08/01/07" and "08/11/07." The ground beef products were produced on various dates between Jul 19 and 30 and were distributed to retail establishments in Alaska, Idaho, Oregon and Washington. Based on product shelf life, these products would no longer have been sold in grocery stores after Aug 5. However, these products could be in consumers' freezers, and it is important that consumers look for and return these products if they find them. The Washington State Department of Health says several illnesses of E. coli linked to beef were reported in late July and the first week of August 2007. A child and 5 adults were sickened in King, Island and Clallam counties; 2 people were hospitalized but have since recovered, the department said. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

## **INTERNATIONAL DISEASE REPORTS:**

**TULAREMIA (Russia):** 26 Aug 2007, According to the report of regional Rospotrebnadzor (Federal Supervision Agency for Customer Protection and Human Welfare), 7 cases of tularemia were registered in the settlement of Berezovo from Aug 16 - 23. Four cases have been confirmed by laboratory tests. A local authority has commissioned a plan for action to control the spread of infection. The movement of non-immunized people to the areas of risk is prohibited. Mass information campaigns have been launched to deliver health and prevention information. A non-scheduled immunization for tularemia has been planned. House visits are being performed to identify sick people, to control rodent invasion, and to supply repellents. (Tularemia is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

**CHOLERA (Iraq):** 28 Aug 2007, A cholera epidemic has spread in northern Iraq, particularly in Kirkuk and Sulaimaniya, killing at least 5 people, the WHO has said. A WHO source, refusing to be named, told the newspaper laboratory

confirmed and observed cases of cholera in northern Iraq could reach thousands and there were fears the epidemic could strike other areas, due to poor sanitation. The health minister in the regional Kurdish government, Zaryan Othman, confirmed the cholera-related deaths and said thousands of people have been hospitalized in the past week on suspicions of contracting the disease. Cholera has always been present in central and southern parts of Iraq, particularly in the hot months of summer, but the epidemic has rarely hit northern Iraq with such severity. Health officials blame the disease on the disruption and damage to water purification systems and pipes, saying it is not unusual for heavy sewage water to mix up with tap water. While doctors in the Kurdish city of Sulaimaniya say they are certain to contain the epidemic, the worsening conditions in the oil-rich city of Kirkuk make the control of the disease rather difficult. Politically Kirkuk is almost in an upheaval with the disparate political and ethnic groups in a constant fight. Members of the Qaeda organization have also increased their presence in the city as pressure mounts on their traditional strongholds in central Iraq. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

**CHOLERA (Guinea):** 28 Aug 2007, At least 800 more people have been infected with cholera over the last week, bringing the total number of reported cases to 2500 since January 2007. According to the Guinean Ministry of Health, 90 of the 2500 cases have been fatal. "The number of people infected by the disease in Conakry has considerably increased since July 2007," said Sergio Martin Esteso, program head for Medecins Sans Frontieres (MSF) in Guinea, in a statement. "Of the 1260 patients treated in the 3 centers where MSF works, more than 1000 have been in the past 3 weeks." "Once again, health facilities weren't well enough prepared to cope with this emergency," Esteso said. Since the arrival of rains in late May 2007, cholera cases recorded by the Guinean Ministry of Health have multiplied exponentially with each passing week. From Aug 13-19, the Ministry recorded 723 cases. The capital city Conakry has borne the brunt of the outbreak, accounting for 1260 of the 2496 total cases recorded to date. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

**CHOLERA (India):** 29 Aug 2007, The death toll from an outbreak of cholera in the eastern Indian state of Orissa has risen to 115, officials say. In the past 2 days, 35 people have died of the disease in 3 tribal districts, they added. The outbreak has affected Rayagada, Koraput, and Kalahandi districts where more than 2000 people have been admitted to hospitals, officials say. Unofficial sources say the death toll could be higher than 200. The cholera epidemic started from Kashipur, in Rayagada district, nearly 310 miles from the state capital, Bhubaneswar. A senior health official in the district said at least 64 people had died there. Orissa's disease surveillance unit says cholera-related deaths have been reported from outside the 3 tribal districts. The disease was confirmed to be cholera by the microbiology department of MKCG Hospital in Berhampur and Regional Research Laboratory in Bhubaneswar. Health officials said microbiological tests conducted on 43 samples collected from patients in the affected villages had revealed the presence of the cholera bacterium in at least 31 cases. The areas affected by the cholera outbreak are in the Kalahandi-Bolangir-Koraput region, some of the most economically backward districts in the country. Most of the victims are believed to be tribes people, say officials. (Water Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

**VIRAL HEMORRHAGIC FEVER, SUSPECTED (Democratic Republic of Congo)**: 29 Aug 2007, More than 100 people have died in a remote part of the Democratic Republic of Congo, the result of a suspected hemorrhagic fever epidemic, local health officials said. People began dying of the suspected fever 2 weeks ago near Mweka, an area in the province of Kasai Occidental, said Jean-Constatin Kanow, the chief medical inspector for the province. "We began by suspecting typhoid fever, but now we believe it is hemorrhagic fever," said Kanow. The DRC has in the past seen large outbreaks of Marburg and Ebola, both hemorrhagic fevers caused by viruses that in severe cases attack the central nervous system and cause bleeding from the eyes, ears and other parts of the body. The deaths began following the funeral of 2 village chiefs. "Everyone that attended those funerals is now dead," said the medical inspector. According to Kanow, hemorrhagic fever is transmitted by contact with an infected person. In all, 4 villages are affected and 217 people have come down with the illness. Of the 103 recorded deaths, 100 were adults and 3 were children, said Kanow. (Viral hemorrhagic fevers are listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

JAPANESE ENCEPHALITIS (India): 29 Aug 2007, Japanese encephalitis has killed 185 people in India this year, the mosquito-borne disease claiming 115 lives in Assam alone, and a UN official has sought a more focused immunization drive. According to the Health Ministry, as of Aug 16, 9 states reported 837 cases of the disease commonly known as brain fever. Deaths were reported from 4 states. Japanese encephalitis can affect the central nervous system and cause severe complications like paralysis, coma and finally death. According to the WHO, the disease is fatal in up to 30 percent of cases, and there is a possibility that those who survive may be disabled for life. UN officials say India can do much more to combat the disease. Marzio Babille, chief of the health wing at the UNICEF office said: "India produces only a 10th of the vaccine doses required for the country. India has good expertise to produce desired vaccines, but they need to prioritize them. A good national immunization plan, adequate doses of vaccine, and ability of the government to investigate thoroughly and carry out surveillance are a few things required to handle the disease," Babille told IANS. He said that although the mosquito was the primary reason for Japanese encephalitis, horses and pigs were the reservoirs of the virus. "Many rural people in Gorakhpur are living in close proximity to pigs, and this could be one of the reasons why many cases are reported from this district of Uttar Pradesh," the official said. He added that lack of consistent focus in the immunization drive in Assam was a key reason for the high mortality in the state. Of the 185 deaths, the highest toll was in Assam, and Uttar Pradesh was next with 65. Babille, however, said that the number of deaths across India had gone down and that efforts must now be made to reach "zero mortality level." Authorities said they have extended the Japanese encephalitis vaccination program from 11 districts across 4 states in 2006 to 29 endemic districts across 9 states. (Viral encephalitis is listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

**E. COLI 0157, TOURIST AREA (Ireland):** 29 Aug 2007, An outbreak of E. coli is being investigated in Enniscrone, County, Sligo, after 6 people became ill with gastroenteritis. The Health Service Executive (HSE) West said the 6 people had suffered from E. coli O157 infection but are now recovering. "There are concerns about a possible association between these infections and people who had been in Enniscrone County, Sligo between Jul 20 and Aug 20," the HSE said in a statement. It added, however, that it is in the early stages of the investigation and that no conclusive findings have been made at this time. As a precautionary measure, the HSE said it would like to identify members of the public who visited, stayed in, or ate food in Enniscrone between Jul 20 and Aug 20 and who subsequently became ill with diarrhea, vomiting, or abdominal pain. Anyone who suffered such illness should contact the HSE helpline at 1 890 200 548. (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) \*Non-suspect case

**ANTHRAX, HUMAN, OVINE (Mongolia):** 30 Aug 2007, Local media reports that a 65-year-old herder in Tuvshruulekh sum district of Arkhangai Province in Mongolia recently contracted anthrax. The herder had contact with sick sheep a week ago and later was confirmed to have contracted anthrax. The county head has already ordered the outbreak area closed and more than 2000 heads of livestock vaccinated. Recently, cases of anthrax in humans and livestock have occurred in several provinces of Mongolia, and one person has died. Mongolian agencies remind citizens not to touch the carcasses of diseased livestock, so as to prevent transmission of anthrax. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) \*Non-suspect case

CHIKUNUNYA, SUSPECTED (Italy): 1 Sept 2007, In the little town of Castiglione di Cervia (province of Ravenna, Italy), since mid July 2007, several people have been attended at the hospital and health centers with high fever and arthralgia, joint and muscular pain, severe headaches, body aches and, in some cases, a rash was also noted. Since the beginning of August 2007, an increasing number of febrile syndromes associated with arthralgia have been recorded in the general population of the area. Initially, only dozens of residents were infected; now that number has jumped to about 100-150. Many of the sufferers are already better, but the number of new infections is still on the rise. The patients had been suspected of being infected with chikungunya virus based on the clinical presentation. Health authorities had fumigated the village to kill the Aedes albopictus mosquitoes that infest the area, had taken blood samples from patients, and sent the samples to the laboratory of the Istituto Superiore di Sanita- E0-ISS (the leading technical and scientific public body of the Italian National Health Service). The results of the lab tests are unknown. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) \*Non-suspect case

\*Cases and outbreaks will be cited for suspect level with regards to suspicion of BT threat. Therefore, cases and outbreaks will be categorized as "Determined BT", "Suspect" or "Non-suspect".

## OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

MMWR Surveillance Summaries. September 7, 2007 / 56(SS07): 1-10.

Cryptosporidiosis Surveillance - United States, 2003-2005

This surveillance summary describes an increase in cryptosporidiosis, the leading cause of reported recreational water-associated outbreaks of gastroenteritis, during 2003 - 2005 in the United States.

MMWR Surveillance Summaries. September 7, 2007 / 56(SS07): 11-18.

Giardiasis Surveillance - United States, 2003-2005.

This surveillance summary describes the disease burden and epidemiologic characteristics of giardiasis, a gastrointestinal illness that has been linked to waterborne and foodborne outbreaks, during 2003 - 2005 in the United States.

**MMWR Weekly Report.** September 7, 2007 / 56(35): 909-911.

<u>Multistate Outbreaks of Salmonella Infections Associated with Raw Tomatoes Eaten in Restaurants - United States, 2005-2006</u>

This report describes the investigations of four large multi state outbreaks of *Salmonella* infections associated with eating raw tomatoes at restaurants occurring in the United States during 2005 - 2006.

**NOTE**: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information is a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

Questions about the content of this review or if you have received this and do not wish to receive these weekly notices,

please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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